

REMARKS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-14, 16, 17, and 19-25 are pending in this application, Claims 15 and 18 having been cancelled without prejudice or disclaimer; and Claims 1, 9, 16 and 19 having been amended by the present Amendment. Support for amended Claims 1, 9, 16 and 19 can be found, for example, in the original claims, drawings, and specification as originally filed.¹ No new matter has been added.

In the outstanding Office Action, the claims were objected to due to informalities; Claims 1-11, 20, and 22-25 were rejected under 35 U.S.C. § 103(a) unpatentable over Robins et al. (U.S. Patent No. 6,430,184; hereinafter “Robins”) in view of Hellwig et al. (U.S. Patent No. 7,020,149; hereinafter “Hellwig”); Claims 12 and 14-18 were rejected under 35 U.S.C. § 103(a) as unpatentable over Robins and Hellwig in view of Kato et al. (U.S. Patent No. 5,544,336; hereinafter “Kato”); Claim 21 was rejected under 35 U.S.C. § 103(a) as unpatentable over Robins and Hellwig in view of Halliday et al. (U.S. Patent Publ. No. 2002/0083345; hereinafter “Halliday”); and Claims 13 and 19 were rejected under 35 U.S.C. § 103(a) as unpatentable over Robins, Hellwig, and Kato in view of Fiorini (U.S. Patent No. 5,740,173).

In response to the claim objections, Applicant has cancelled Claims 15 and 18, rendering the objection moot. Accordingly, Applicant respectfully requests the objection to the claims be withdrawn.

In response to the rejections under 35 U.S.C. § 103, Applicant respectfully submits that amended independent Claim 1 recites novel features clearly not taught or rendered obvious by the applied references.

¹ See for example at page 7, lines 12-13 and page 8, lines 8-13 of the specification; and Figure 5.

Amended independent Claim 1 is directed to a system for processing asynchronous data, including, *inter alia*:

...a plurality of packeting modules configured to packet asynchronous data; and

a message composition module connected to said plurality of packeting modules,

wherein said message composition module is configured to compose a message and send a request for a packet directly to at least one packeting module of said plurality of packeting modules when said message composition module needs a packet, and

wherein said at least one packeting module is configured to stop packeting asynchronous data, even if packeting of the asynchronous data is not completed, in response to said request and to send to said message composition module a packet of asynchronous data formed prior to receiving said request.

Page 5 of the outstanding Office Action acknowledges that “Robins does not explicitly disclose FE 40 (message composition module) request of packet from QM 30 (packeting module) when it needs a packet.” In an attempt to remedy the above-noted deficiency of Robins, the Office Action cites Helwig. Page 5 of the Office Action asserts that Helwig describes a method for operating a switching system for data packets in which, as soon as an access controller MAC 12 signals its availability to the queue manager 42 by means of a message 3, the queue manager requests a packet from the memory management unit in order to compose messages of packets. However, Helwig fails to teach or suggest that “said message composition module is configured to compose a message and send a request for a packet *directly* to at least one packeting module of said plurality of packeting modules when said message composition module needs a packet,” as recited in Applicant’s amended independent Claim 1.

Column 5, lines 4-23 of Helwig describes that:

When an access controller MAC is able to transmit a data packet, it signals its availability to the queue manager 42 by means of a message 3. The queue manager 42 receives this availability information and a queue belonging to this local output connection is sought. Provided that a data packet is waiting to be transmitted there, the queue manager 42 sends the address of the reference element and the local output connection to the protocol unit 40 as message 4. The protocol unit 40 produces a message 5 for the memory management unit 18. The memory management unit 18 then starts to transmit the requested data packet via the bus 2 to the output FIFO memory 20 for the appropriate output connection. This procedure is denoted by 6 here. When transmission has ended correctly, the memory management unit 18 checks the counter for multiple transmissions, and, if this counter is counted down, the memory management unit 18 will enable the appropriate memory area in the data packet memory 44.

Thus, in Helwig, the queue manager 42 sends the address of the reference element and the local output connection to the protocol unit 40 as a message 4. Then, the protocol unit 40 produces a message 5 for the memory management unit 18. Next, the memory management unit transmits the requested data packet via the bus 2 to the output FIFO memory 20 for an output connection.

In other words, when a request is sent from the controller 12 to the queue manager 42, as shown in Figure 1, the request must go through the protocol unit 40. The protocol unit 40 then makes another request to the memory management unit 18. Thus, Helwig does not show that a message composition module is configured to compose a message and send a request for a packet *directly* to at least one packeting module when the message composition module needs a packet.

Accordingly, Applicant respectfully submits that amended independent Claim 1 (and all claims depending thereon) patentably distinguishes over Robins and Helwig. Further, Applicant respectfully submits that Kato, Halliday, and Fiorini fail to cure any of the above-noted deficiencies of Robins and Helwig.

Amended independent Claim 9 recites “means for receiving a request, in the packeting module, directly from a message composition module when said message composition module needs a data packet.” Thus, independent Claim 9 (and all claims depending thereon) are believed to be patentable for at least the reasons discussed above.

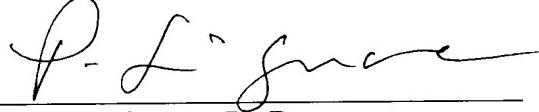
Amended independent Claim 16 recites “means for requesting said packet directly from said means for packeting when a message composition module needs said packet” and is also believed to be patentable (and all claims depending thereon) for the reasons discussed above.

Accordingly, Applicant respectfully requests the rejections under 35 U.S.C. § 103(a) be withdrawn.

Consequently, in view of the present amendment, and in light of the above discussion, the pending claims as presented herewith are believed to be in condition for formal allowance, and an early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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